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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,470	03/27/2004	Sergei Aleksandrovich Shumov		9786

7590

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EXAMINER

SUKMAN, GABRIEL S

ART UNIT

PAPER NUMBER

3641

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/810,470

Applicant(s)

SHUMOV ET AL.

Examiner

Gabriel S. Sukman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-12 and 16 is/are rejected.
- 7) ☒ Claim(s) 13-15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation in the preamble, "A system of active protection system of objects." The repetition of the word "system" makes the limitation unclear.

Claim 1 recites the limitation "said moving out device" in line 7. There is insufficient antecedent basis for this limitation in the claim. The device has only been defined as a "device for moving said target." It is unclear whether the moving device requires a "moving out."

Claims 2-8 depend from claim 1 and are therefore rejected as being indefinite as well.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 8, 9-12, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,782,793 B1 to Lloyd.

Lloyd discloses all of the limitations of claim 1 including a protection system for objects that includes a control panel (see col. 3, lines 17-21; a control panel is inherent in performing the requisite actions described), a unit on a protected object (the tank, 2) that includes a target detection device (sensor, 1), a protective ammunition (charges, 4) and a device for moving out the device (shutter, 27). The system also includes a case that protects the elements (see col. 7, lines 13-17).

Claim 2 is anticipated by Lloyd as well since the system inherently includes a switching means and a power means to control and power the system.

Claim 3 is anticipated in view of col. 7, lines 13-17: "the housings and shutters of the aforementioned embodiments are made of a material that can absorb the kinetic energy of shrapnel or small arms fire."

Claim 4 is anticipated since the ammunition is connected with the moving out device through the vehicle or at least the electrical connections.

Claim 8 is clearly anticipated by the plurality of units disclosed by Lloyd and seen in figure 1.

Claims 9-12 and 16 are anticipated by Lloyd as per the discussions above regarding claims 1-4 and 8 respectively.

***Claim Rejections - 35 USC § 103***

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lloyd.

Lloyd discloses all of the limitations of claims 5 and 13 except for specifically teaching the use of a helical rack to move the object. But helical racks are old and well known in the art to provide translational motion and it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a helical rack to move the target detection device since it is known in the art to be an efficient and robust mechanism by which to accomplish translational motion.

#### ***Allowable Subject Matter***

Claims 13-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 5-8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not disclose or suggest the combination that

teaches the protection system as claimed in which the detection device, together with the ammunition, is moved outside of a protective case by a moving out device.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,408,763 B1 to Hurtt et al.

U.S. Patent No. 3,875,844 to Hicks

U.S. Patent No. 5,677,506 to Wallin

U.S. Patent No. 3,893,368 to Wales, Jr.

U.S. Patent No. 6,128,999 to Sepp et al.

U.S. Patent No. 5,012,742 to Jones

U.S. Patent No. 5,001,984 to Jones et al.

U.S. Patent Application Publication No. US 2003/0164087 A1 to Vives et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gabriel S. Sukman whose telephone number is (571) 272-6883. The examiner can normally be reached on M-F, 8:30-6:00, every other Friday off.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Carone can be reached on (571) 272-6873. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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MICHAEL J. CARONE  
SUPERVISORY PATENT EXAMINER